

McGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS

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Edition**

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adrenergic [ˈædrɪnɜːrɡ] Describing the chemical activity of adrenaline or epinephrine-like substances. {ad-rə-nər-jik}

adrenergic blocking agent [ˈædrɪnɜːrɡ ɪk ˈblɒkɪŋ ʌdʒənt] Any substance that blocks the action of epinephrine or an epinephrine-like substance. {ad-rə-nər-jik ˈblak-ig ʌdʒənt}

adrenochrome [ˈædrɪn ˈkrɒm] C12H15O2N A brick-red oxidation product of epinephrine which can convert hemoglobin into methemoglobin. {ad-rən ˈkrɒm}

adrenocortical hormone See adrenal cortex hormone.

adrenocortical steroid [ˈædrɪn ˈkɔːr-ti-kəl ˈstɪr-ɒɪd] 1. A steroid that is obtained from the adrenal cortex. 2. A steroid that resembles adrenal cortex steroids or has physiological effects like them. {ad-rən ˈkɔːd ˈsɔːl ˈstɪr-ɒɪd}

adrenocorticotrophic hormone [ˈædrɪn ˈkɔːr-ti-kə-tro-fik ˈhɔːr-mɒn] The chemical secretion of the adenohypophysis that stimulates the adrenal cortex. Abbreviated ACTH. Also known as adrenocorticotrophic hormone. {ad-rən ˈkɔːd ˈsɔːl ˈstɪr-ɒɪd ˈhɔːr-mɒn}

adrenogenital syndrome [ˈædrɪn ˈdʒen-ɪ-təl ˈsɪn-drɒm] A group of symptoms associated with hypersecretion of adrenal cortex hormones; effects vary with sex and time of development. {ad-rən ˈdʒen-ɪ-təl ˈsɪn-drɒm}

adrenomedullary [ˈædrɪn ˈmɛd-ʊ-l-ə-ri] Pertaining to the adrenal gland medulla. {ad-rən ˈmɛd-ʊ-l-ə-ri}

adrenotropic [ˈædrɪn ˈtrɒp-ɪk] Of or pertaining to an effect on the adrenal cortex. {ad-rən ˈtrɒp-ɪk}

adrenotropic hormone See adrenocorticotrophic hormone.

adret [ˈædrɪt] The sunny (usually south) face of a mountain flanking high timber and snow lines. {ad-rat}

ADR studio [ˈædr ˈstʊdi-ə] A sound-recording studio used in motion-picture and television production to allow an actor who did not intelligibly record his or her speech during the original filming or video recording to do so by watching himself or herself on the screen and repeating the original speech with lip synchronization; it is equipped with facilities for recreating the acoustical liveliness and background sound of the environment of the original dialog. Derived from automatic dialog replacement studio. Also known as postsynchronizing studio. {ad-rɪt ˈstʊd-ɪ-ə}

ADSL See Mode S.

ADSL See asymmetric digital subscriber line; asynchronous digital subscriber loop. {ad-dɛs-ɪl ˈsɛ ˈsɔːl}

adsorbate [ˈæd-sɔːb-ɪt] A solid, liquid, or gas which is adsorbed as molecules, atoms, or ions by such substances as charcoal, silica, metals, water, and mercury. {ad-sɔːb-ɪt}

adsorbent [ˈæd-sɔːb-ənt] A solid or liquid that adsorbs other substances, for example, charcoal, silica, metals, water, and mercury. {ad-sɔːb-ənt}

adsorption [ˈæd-sɔːr-pən] The surface retention of solid, liquid, or gas molecules, atoms, or ions by a solid or liquid, as opposed to absorption, the penetration of substances into the bulk of the solid or liquid. {ad-sɔːr-pən}

adsorption catalysis [ˈæd-sɔːr-pən ˈkæt-əl-ɪ-sɪs] A catalytic reaction in which the catalyst is an adsorbent. {ad-sɔːr-pən ˈkæt-əl-ɪ-sɪs}

adsorption chromatography [ˈæd-sɔːr-pən ˈkrɒ-mə-tɒ-ɡrə-fi] Separation of a chemical mixture (gas or liquid) by passing it over an adsorbent bed which adsorbs different compounds at different rates. {ad-sɔːr-pən ˈkrɒ-mə-tɒ-ɡrə-fi}

adsorption complex [ˈæd-sɔːr-pən ˈkɒm-pleks] An entity consisting of an adsorbate and that portion of the adsorbent to which it is bound. {ad-sɔːr-pən ˈkɒm-pleks}

adsorption gasoline [ˈæd-sɔːr-pən ˈɡæs-ə-lɪn] Gasoline extracted from natural gas or refinery gas. {ad-sɔːr-pən ˈɡæs-ə-lɪn}

adsorption indicator [ˈæd-sɔːr-pən ˈɪn-dɪ-k-ə-tɒr] An indicator used in solutions to detect slight excess of a substance or ion; precipitate becomes colored when the indicator is adsorbed. An example is fluorescein. {ad-sɔːr-pən ˈɪn-dɪ-k-ə-tɒr}

adsorption isobar [ˈæd-sɔːr-pən ˈɪz-ə-b-ə] A graph showing how adsorption varies with some parameter, such as temperature, while holding pressure constant. {ad-sɔːr-pən ˈɪz-ə-b-ə}

adsorption isotherm [ˈæd-sɔːr-pən ˈɪz-ə-θ-ɜːm] The relationship between the gas pressure p and the amount w , in grams, of a gas or vapor taken up per gram of solid at a constant temperature. {ad-sɔːr-pən ˈɪz-ə-θ-ɜːm}

adsorption potential [ˈæd-sɔːr-pən ˈpɒ-t-ən-ʃ-əl] A change in the chemical potential that occurs as an ion moves from a gas or solution

phase to the surface of an adsorbent. {ad-sɔːr-pən ˈpɒ-t-ən-ʃ-əl}

adsorption system [ˈæd-sɔːr-pən ˈsɪs-t-əm] A device that dehumidifies air by bringing it into contact with a solid adsorbing substance. {ad-sɔːr-pən ˈsɪs-t-əm}

ADT See abstract data type.

adulterance [ˈæd-ʊl-t-ə-r-əns] A certain type of white or bluish light seen in a gemstone (usually adularia) as it is turned. {ad-ʊl-t-ə-r-əns}

adularia [ˈæd-ʊl-ə-ri-ə] A weakly trichroic form of the mineral orthoclase occurring in transparent, colorless to milky-white pseudo-rhombic crystals. {ad-ʊl-ə-ri-ə}

adularization [ˈæd-ʊl-ə-ri-ə-ɪ-z-ən] Replacement by or introduction of the mineral adularia. {ad-ʊl-ə-ri-ə-ɪ-z-ən}

adult polycystic kidney disease [ˈæd-ʊl-t ˈpɒ-l-ɪ-s-ɪ-t-ik ˈkɪd-ɪ-zi ˈdi-z-ɪz] An autosomal dominant disease that is characterized by the formation of cysts along the length of the nephron that causes the kidneys to enlarge, resulting in kidney failure in middle adulthood. {ad-ʊl-t ˈpɒ-l-ɪ-s-ɪ-t-ik ˈkɪd-ɪ-zi ˈdi-z-ɪz}

adult rickets See osteomalacia. {ad-ʊl-t ˈrɪk-ɪ-ts}

ad valorem tax [ˈæd və-l-ər-əm ˈtæks] Property tax for oil-producing properties, assessed at a flat rate for each net barrel of oil produced. {ad və-l-ər-əm ˈtæks}

advance [ˈæd-v-əns] In railway engineering, a length of track that extends beyond the signal that controls it. {ad-v-əns}

advance [ˈæd-v-əns] 1. A continuing movement of a shoreline toward the sea. 2. A net movement over a specified period of time of a shoreline toward the sea. {ad-v-əns}

advance [ˈæd-v-əns] The forward movement of a glacier. {ad-v-əns}

To effect the earlier occurrence of an event, for example, spark advance or injection advance. {ad-v-əns}

1. In making a turn, the distance a vessel moves in its initial direction from the point where the rudder is started over until the heading has changed 90°. 2. The distance a vessel moves in the initial direction for heading changes of less than 90°. {ad-v-əns}

advanced [ˈæd-v-əns] Denoting a later stage within a lineage that demonstrates evolutionary progression. {ad-v-əns}

advanced battery [ˈæd-v-əns ˈbæt-ə-ri] A large battery storage system designed to harness solar or wind energy or to store excess electricity during low-demand periods for use during higher-demand periods. {ad-v-əns ˈbæt-ə-ri}

advanced-design array radar [ˈæd-v-əns ˈdɪ-z-ɪn ˈæ-ri ˈræ-dar] A radar system that uses two antennas and a data-processing center to locate and identify enemy intercontinental ballistic missiles. Abbreviated ADAR. {ad-v-əns ˈdɪ-z-ɪn ˈæ-ri ˈræ-dar}

advanced fuel fusion [ˈæd-v-əns ˈfjuː-əl ˈfjuː-z-ən] All energy-producing reactions of light nuclei other than the reaction of a deuteron and a triton to produce a helium-4 nucleus and a neutron. {ad-v-əns ˈfjuː-əl ˈfjuː-z-ən}

advanced gallery [ˈæd-v-əns ˈɡæl-ə-ri] A small heading driven in advance of the main tunnel in tunnel excavation. {ad-v-əns ˈɡæl-ə-ri}

advanced gas-cooled reactor [ˈæd-v-əns ˈɡæs-ə-koʊl-əd ˈri-ækt-ə-ɪ-ə] A power-generating nuclear reactor which has used-clad uranium dioxide fuel elements and is cooled by carbon dioxide gas. {ad-v-əns ˈɡæs ˈkɒl-əd ˈri-ækt-ə-ɪ-ə}

advanced line of position [ˈæd-v-əns ˈlɪn ˈəv ˈpɒ-zɪʃ-ən] A line of position which has been moved forward along the course line to allow for the run since the line was established; the opposite is a retired line of position. {ad-v-əns ˈlɪn ˈəv ˈpɒ-zɪʃ-ən}

advanced potential [ˈæd-v-əns ˈpɒ-t-ən-ʃ-əl] Any electromagnetic potential arising as a solution of the classical Maxwell field equations, analogous to a retarded potential solution, but lying on the future light cone of space-time; the potential appears, at present, to have no physical interpretation. {ad-v-əns ˈpɒ-t-ən-ʃ-əl}

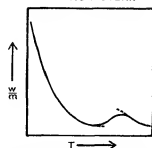
advanced programmatic risk analysis [ˈæd-v-əns ˈprɒ-ɡr-ə-m-ə-t-ɪk ˈrɪsk ˈæ-n-ə-l-ɪ-s-ɪs] A method for managing engineering programs with multiple projects and strict resource constraints which balances both technical and management risks. {ad-v-əns ˈprɒ-ɡr-ə-m-ə-t-ɪk ˈrɪsk ˈæ-n-ə-l-ɪ-s-ɪs}

Advanced Research Projects Agency Network [ˈæd-v-əns ˈrɪ-s-ərch ˈp-r-ə-j-ə-k-ts ˈæ-n-ə-s ˈnet-w-ɜːk] The computer network developed by the U.S. Department of Defense in 1969 from which the Internet originated. Abbreviated ARPANET. {ad-v-əns ˈrɪ-s-ərch ˈp-r-ə-j-ə-k-ts ˈæ-n-ə-s ˈnet-w-ɜːk}

advanced wastewater treatment See tertiary sewage treatment. {ad-v-əns ˈsɪ-w-ɪ-j ˈtri-t-ɪ-m-ənt}

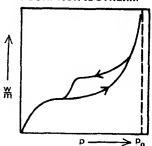
advanced signal-processing system [ˈæd-v-əns ˈsɪ-g-n-əl ˈpr-ə-s-ɛ-s-ɪŋ ˈsɪs-t-əm] A portable data-processing system for military use; its complete

ADSORPTION ISOBAR



A typical adsorption isobar; w is weight of material adsorbed per unit weight of adsorbent, and T is absolute temperature.

ADSORPTION ISOTHERM



A typical adsorption isotherm; w is weight of material adsorbed per weight of adsorbent, and p is pressure.